Course Name: Economics of Conservation Planning	
Course Coordinator: Economist	Course Number: MI000044

**Overview:** The participants will learn to integrate and apply field level economics into conservation planning procedures, learn how to apply and use results of field level application of economic tools, and improve their understanding of the land user's perspective of conservation. Participants will learn to provide economic and social information for decision making. The course was designed to accomplish several objectives.

**Purpose:** The purpose of this course is to enable non-economists to understand and perform basic economic analysis, using standard economic natural resource planning techniques. It also enables participants to become more sensitive to land user decision making and to develop complete, economically sound, technically accurate conservation plans. Participants learn how to apply field level economic tools during the conservation planning process and learn how sociology concepts impact land user's decision making.

- Teach basic economic tools for field employees
- Demonstrate conservation farm planning techniques
- Present a land user's and conservationist's perspective of conservation economics
- Demonstrate conservation effects
- Provide guidance on multiple resource decision making

## **Prerequisites:**

• Are working on or have completed at least one conservation plan

**Duration:** 3 days

**Target Audience:** NRCS and conservation partner employees providing conservation planning assistance to customers

**Expected Outcomes:** The planners will be able to apply economic concepts and tools during conservation planning to formulate and evaluate cost effective conservation alternatives. Planners will have a minimum economic tool application proficiency level expected at the end of the course is 3 – perform with supervision.

## **Resources needed:**

State Resource Conservationist for Introduction or Closing Remarks Michigan Field Office Technical Guide
National Planning Procedures Handbook
Classroom with space for 4 tables of 4-5 participants per table
Computer and projector
2 Flip charts
Participants need to bring a calculator

Outline for: Economics of Conservation Planning

Day 1: 8:00 AM to 5:00 PM

Course Introduction, Purpose of the Course, Expectations, Pre-Test

Case Study Introduction

- Farm Description and discussion of resource problem checklist
- Watershed Description and Community Goals

Sociological Session:

- Farming Philosophy, Cultural Considerations, Adoption-Diffusion Model, Risk Assessment

Begin case farm analysis Economics in Phase I of Planning Process

- Identify farm objectives: goals & opportunities
- Social and economic considerations applied to case farm
- Analyze farm performance: understanding farm financial statements and the farm environment. Introduction of cost price risk concepts applied to case farm.

Begin case farm analysis Economics in Phase II of Planning Process

- Analyze farm and formulate alternatives and options.

Day 2: 8:00 AM to 5:00 PM

Economic Tools and Concepts to evaluate farm alternatives

- Scoping
- Conservation Practice Costs & Cost Estimates
- Future with and future without
- Marginal Analysis
- Investment Analysis
- Cost Effectiveness
- Benefit/Cost Analysis
- Partial Budgeting
- Conservation Effects (CED)
- Breakeven Analysis
- Financial versus Economic Analysis

Apply tools & concepts to case farm in work groups

- Evaluate Alternatives
- Prepare economic analysis for presentation to decision maker
- Develop schedule of installation for case farm
  - Cost price risk activity to look at risk & how that changes the plan

Day 3: 8:00 AM to 4:00 PM

Economics applied to Conservation Implementation and Evaluation

- Economic analysis of implementation schedule and impacts of conservation program contracts to assist with implementation.
- Decision making based on social and economic considerations
- Analyze Farm Performance with conservation implementation & apply risk activity to see how economic conditions alter implantation.
- Develop & Documentation of Social and Economic effects & impacts (NRCS-CPA-52 and NRCS-CPA-6)
- Other Evaluation activities (economics applied in step 9 of the planning process)

Summarize Class Experience – reports from groups

Other economic tools and resources available for economic guidance & support

Post – Test, Class Evaluation, Certificates, and Closing